EBB AND FLOW ON THE BLUE DANUBE

While climbing up the control tower of the lock I had the feeling I was going to watch a few planes taking off or landing. The construction was high, elastic, made of concrete and glass, with an aerodynamic shape and a prismatic geometry. The cabin windows were enormous, panoramic, bent inwardly, giving the impression of water flowing right under one's feet. The wind swung the building as if it had been a steel sheep designed to face any storm and earthquake. It was not a sunny day, such as those we all dream to bathe on during our vaca-

week's reportage

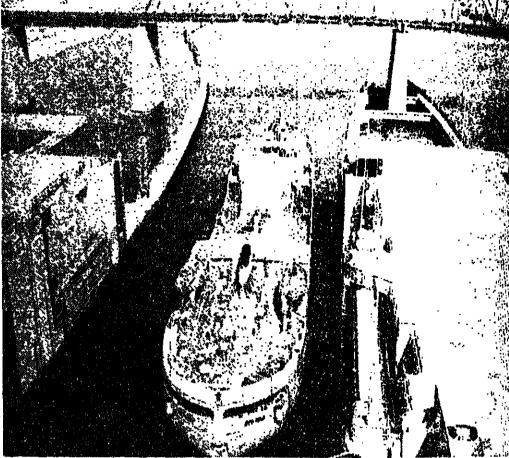
It was carly in the morning and the control crew were all present in the tower to supervise the passage of the first sea-going ship of that day, through the lock No. I, therefore coming from the sea into the river. On the afternoon of the previous day I had witnessed the routine check of all the installations making up the lock No. 2, the operation of filling up and clearing out water segments, worthy of a selsmograph. Nothing out of order, in other words the equipment was functioning like clockwork and therefore builders had done their duty, in line with their previous hydro-power dam achtevements. To resume my account of the Agigea lock No. 1 control tower, I must mention that it lies between the kilometres 62.250 and 62.852. From up above, the twin locks look like two huge vessels. Albatrosses were flying close to where I was sitting as if trying to touch my forchead with their wings, shricking and then diving violantly into the water.

In the horizon I could see a sea-going ship called Orion, satting under Fortuguese flag as she prepared to enter the Danube through the lock heading for the other ports and stopovers along the river, deep into the heart of Europe. From a distance the ship looked very small. But as she approached the lock gates facing the sea she gradually and somethow monacingly came into its own. It seemed to outweigh the overrall dimensions of the filling and clearing segment, inside the lock water was brought to the sea level. Before the ship could pass under the unstream railroad bridge near the sea, ongineer Radu Severin who supervised the operation of passing through the lock, through the Canal, asked whether the metallic antenna popping up from the mast was below. It meters. A volce coming through the rick antenna seemed to be higher than the bridge level, running the risk at anyther the metallic antenna popping the risk at anyther the metal

tions. On the contrary, clouds were hustling by, with furtive peepings of the sun arising from the wa-ters. Actually it was both raining and snowing and the wind was blowing in gusts. The water of the Danube-Black Sea Canal was raising waves into the horizon, flowing into a darkened sea.

ment. Once again he was assured by people on dock that nothing of the kind would happen,
Finally, the lock gates opened,
unfolded and then folded back
laterally. The ship slid through
the lock area. It was 9.21 a.m.
The ship's crew stood at attenflon, lined up on deck, A ceremeny now part and parcel of
the "clegant manners" observed on any canal of the world.
The antenna got closer to the
bridge. It touched the bridge
planks, bending like a spring
and then returned to its normal
position like a baton in the
band of a conductor. The conirol team relaxed with a sigh of
relief. A flight of albairosses
landed on the ship's dock. As it
passed under us, the vessel loolced like a gant, a floating
pyramid. Encoded messages
beeped in and out the radio
station, Every move of the ship
through the lock was carefully
watched on the control panel of
the lower. Moments of silence,
of watchtuiness accompanying
the vessel's passage through the
locks alternated with moments
of a "radio breadeast play" dominated by calm voices taking
over orders. The ship passed
the limits of the gate facing the
sen and entered the lock proper, with a length of 310 metres
and a width of 25 metres. Slowiy, the gates from the see closed behind her, set in motion by
electronic remote control. Huge
as they are, made of solid meial, the gates are not allowed
to close below a safety coefficlent of three millimeters. From
that moment started the mooring of the ship who due to laieral equipment might loose her
bulance when the basin is filled
up to the level of the Danube
waters, therefore rising by 7.50
m. Step by step water began to
grow inside the lock like a conirolled tide, until the ship reaohed the river's water-line, An

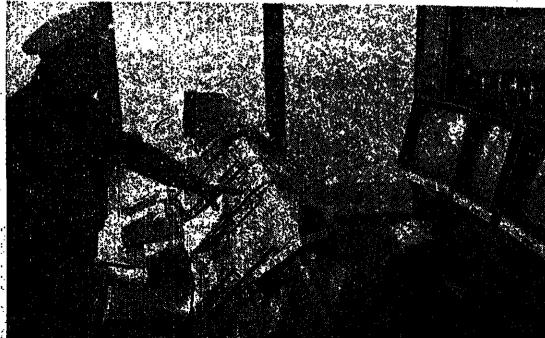
Photos: Two instances of the lock of Agigea and the lock control





operation which, naturally, was on smoothly. A safe, resting operation. Finally, the gate taring the Danuba went under water, down to the bottom of the lock, making room for the ship to pasy easily, like in dream, beyond the memory of the seas crossed up to the point. Afterwards, the water wore guided into another perfectly controlled ebb, lowering so as to receive other boats. It was 9.15 a.m.

The ship was now heading a the lock of Cernavoda. From the control tower I looked it the lawns surrounding the lock then covered by a layer of pate snow, then at the turbid sea into the distance, isolated from the canni's mouth, from the look gates by a pier, least its waters should peneirs the Danube too deeply, or the aber way round, to prevent the neighbouring shore. And somewheers, behind, in the direction of the ship freed from the cannot be the cannot be the ship freed from the cannot be from the ground, a bridge of needing all the conjectual was quiet and descried, A july moment the lock No 2 of Africa was preparing to receive a train of barges loaded with its ore and caked cost heading to Chlarnyl, Regifa, and Hondarra, coming from the Conjunt sea-port and the world season. ADRIAN DOHOTARU



EIGHT YEARS OF A RIVER'S LIFE

The Danube-Black Sea Canal was opened on May 26, 1984, at 8.47, in the presence of Nicolae Ceauşescu, the President of the

The Canal was designed and executed by Romanian

Cits execution losted eight years.

The file of the complex project comprises 10,000 settings projects and over 33,500 details of execution.

30,000 people worked here during periods of maximum concentration.

concentration.

Over 7,000 vehicles of various tennages, \$10 established the concentration of tennages, \$10 established the concentration of the concentration of tentages, \$17 tennages, \$17 tennages

yated.

The total length of the Canal Is of \$4.3 km.
The total length of the Canal Is of \$4.3 km.
The Caral his three river party, at well as a later and river port: Constanta.

A traffic of simust 50 million tons can be partially at Brailian ton can be partially at Brailian the two locks of Caracavada and Adjust a rivina o barges of up to 18,000 det and ships can use the Canal.

In the later waterwark cuts the transport distance panels by approximately 400 km.

ROMANIAN

SUPPLEMENT TO NO 51 (560) DECEMBER 23 1988

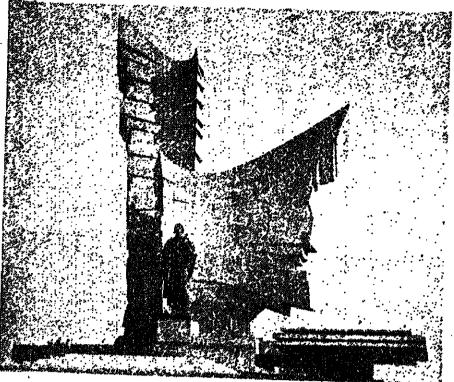


BLECTRONUM

FOREIGN TRADE COMPANY

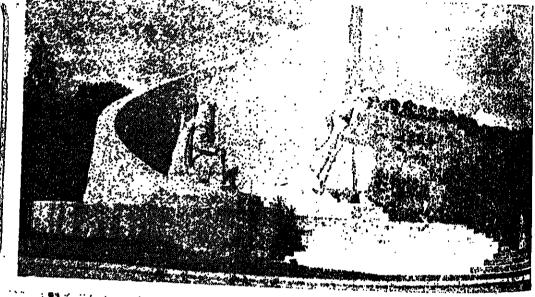
BUCHAREST - ROMANIA . 28-30 GH. MAGHERU BOULEVARD TELEX 11 547, 11 584 @ PHONE 13 7081 POB 22 -- 111

ROMANIAN NEWS





A fine arts senre in great favour with the public, concentrating attention and channelling intellects towards a major idea is 'monumental art. Romanian history, its great moments have been a permanent source of inspiration for monumental sculpture. Numerous works creeted in many of Romania's localities have largely contributed to reshaping the environment in an acsibelic way. Of them, we should mention: the Memorial of Molsel, signed by Vida Geza, paying homage to the peasant-and Horthyism: "Independence" by Gabricia Manole Adoc and Ghoorghe Adoc, in Iasi: "Mircca the Great" by Ina Jalea, in Tulcen: "Stephen the Great" by Himle Birleanu, in Succava and Vasiu! "Michael the Brave" by Oscar Han, in Alba Iulia! "Michael the Brave" by Marius Butunolu, in Ciuj-Napoca, and "Michael the Brave" by George Raduleson, in Sfintu Gheorghe; "Avram laneu" by Emil Mereanu at Baja de Cris; "Siephen the Great" by Mircea Stefanoson and "Petra Musni" by Paul vasilescu in Succava; "Ion Voda" by Gheorghe Turcu, at Rascoliders erected in Baja blare, Paulis, Stintu Gheorghe, Romanian soldiers erected in Baja blare, Paulis, Stintu Gheorghe, Romanian history is marked by the existence of heroes who laid thus closely related to the people's life, being a vasi area of usserilon and flourishing and enjoying broad social resonance. and the meaning of the communication of the property of the communication of the communicatio

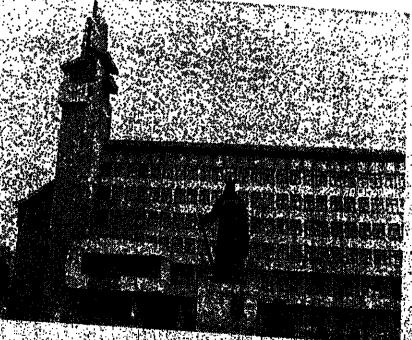




In photos: top left — the Paulla Monupont bottom left — Mircea the Great in Tulcas; top right — Statuary Complex at Mylast i below — Southtural Ensemble at Dealil Florilor — Bala Mare; middle — "Degebalus" — Deve and "Michael the Brave" — Alba Illia'i ballon middle — "Stophen the Great" — Vasiut

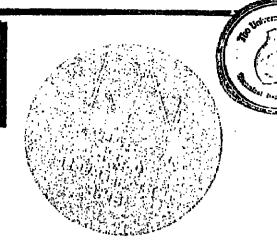








INFORMATION AND COMMENTARY
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THE ROMANIAN NEWS ASDAY
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FRIENDSHIP AND COLLABORATION

MICOLAE CEAUSESCU'S INVITATION, THE PRESIDENT RAID DIZDAREVIC, PAYS AN OFFICIAL.

At the invitation of the General Secretary of the Romanian Communist Party, President of the Republic, Nicolaa Ceaușescu, the President of the Presidium of the Socialist Federal Republic of Yugoslavia, Raif Dizdarovic, arrived in Bucharest on Thursday, December 22, on an official friendly visit to

The new Romanian-Yngolsav sumult falls in line with the deh chronicle of the traditional meetings between the two countries' party and state leaders, which have on every occasion contributed to the expansion of the bilateral relation.

The way countributed refusers

raion.

This was actually underscored during the first round of talks by President Nicolus Ceausesen who balled the official friendly visit paid by Raif Dizdarovic to Romania and voiced his satisfaction at confinuing the traditional Romanian-Yugoslav summit dinlogue, a factor of highest significance for strengthening the bonds of friendship and cooperation between the two countries and peoples.

la his turn, President Raif Dizdarovio ihanked for the invitation to visit Romania, for the bospitality extended to him and expressed satisfaction at meeting President Nicotan Ceausescu and analysing togot-

Michigan better the first the property of the

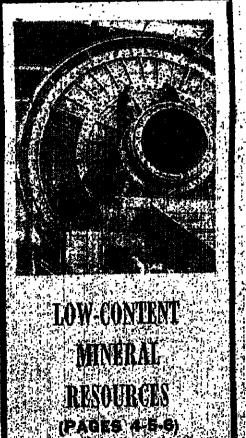


HOLDAYS IN A WINTER SCENERY

Over December 28, 1988 — January 1, 1980, the "Winter I se celebration will be organized Substantial funds have peen earmarked for this traditional celebration."

(PAGE 7)





UNANIMOUS APPRECIATION OF THE ROMANIAN OFFER

In 1989, Romania entered 37 international fairs. In many of them, the Romanian participants were awarded diplomas and medals for the products' quality and technicality, for the attractive and modern way in which they were put on display, Of these we should mention the diplomas obtained by the Masinexportimport and Industrialexportimport foreign trade companies for their consistent participation, over 25 years on end, in the Leipzig International Fair, the diplomas and medals won by Romanian exhibitors at the international fairs in Dubai, Cairo, Budapest, Moscow, Damasens, Bogota, Brne, Nairobi, Hayana and Izmir, the gold medals awarded to Romanian products at the Hayana and Plovdiy fairs, the diploma secured by the Confex Joreign trade company for its constant attendance of the autumn Leipzig International Fair over the last 15 years.

INTERNATIONAL ENGINEERING

For several years now, the Romanian-Australian relations have seen an upwards course. This year's Romanian-Australian summit meeting resulted, among other things, in an intensification of the binicral commercial ites and an expansion of cooperation in areas of mutual interest, as for instance the extractive industry. In this context, Romania ranked among the eleven official participants in the International Engineering Exhibition staged in Sydney, being represented by foreign trade companies exporting high-tech products, such as Maginexportim-

EXHIBITION the experts in the field of technology were the water welding
installations and the automation and measuring, control and
and adjustment electric and
electronic apparatus exhibited
by Electronum, as well as the
motal processing machine tools
displayed by Masinexportimport.

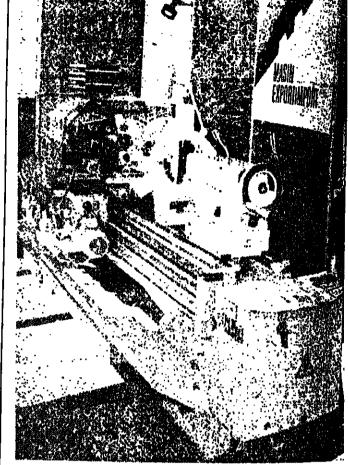
ori.
Since, as we have mentioned, sooperation in the realm of extraction holds a front place in the Romanian-Australian cooperation, at the Sydney exhibition the Industrial expertinport foreign trade company put on view models of mining equipment such as mine loco-

The high technical performance, robustness and modern aspect, the low fuel consumption boas-ted by DAC 32-280 truck (on

ical by DAC 32-280 truck (on the export list of the Universal Autotractor enterprise) and by the all-terrain car ARO 243 D (exported by Auto Dacia onterprise) account for the praise bestowed on these vehicles.

"In fact, all Romanian exhibits in the machine engineering range won the callers and experts' high appreciation. I should mention for instance the vivid interest clicited by the alreraft models put on view by the National Aeronautia Cenire— from light and passenger aircraft to helicoptors and gliders.

"The high technicality of the "The high icchnicality of the electronic and electrical engineering products on the exportist of Electronum and Electro-exportimport enterprises, the quality and diversity of the chemicals, medical drugs and oosmetics created according to original recipes and delivered abroad by Chimica and Danubiana enterprises, just like the relinement and elegance of the knittings, foolwear and leatherwear displayed by Romanoexport and Arpimek enterprises met with the visitors', technicians; and businessmen's appreciation, which entities us to assess that fromania's first par-



not only by the above-mentio-ned Gold Medal and the fa-

vourable impression made by the Romanian pavilion, but also by the fact that during the

by the fact that during the ovent several valuable export contracts were concluded. Thus, in 1989 Universal Autotractor will deliver to Cuba, among others, Diesel engines, tipper lorries and tankers. In its turn, Electronum will self on the Cuban market radio sets and importingoal will deliver electrotegrated circuits: Electroxygenic units and measuring assets.

genis units and measuring ap-paratus; Chimica and Danu-biona will export cosmetics,

THE ZAGREB FAIR

The traditional commercial and cooperation relations but-ween Romania and Yougosiaween Romania and Yougosiavia, spurred by the frequent
contacts between the leaders of
the two parties and states and
favoured by the geographical
proximity of the two countries,
by the many-sided development of their economics, contribute to the intensification of
mutually rewarding goods dellveries. In this context, as exchanges of ideas and information are indispensable for the
identification of new ways and
means of expanding the bilaieral ties, Remanian and Yugoslav firms regulary attend the
exhibitions mounted in Bucharest and Zagreb.
Continuing this tradition, etc.

Continuing this tradition, eleven foreign trade entreprises represented Romania at the 1988 edition of the Zagreb fair. In the siands of the Zagreb fair. In the siands of the enterprises Electronum, Electroexportimport, Universal Autotractor, Centrul National Acronautic, Technolm-portexport, Chimica, Danublana, Arpimex, Romanoexportimport and Prodexport, a great variety of products were exhibited in the fields of electronics, electrical enginearing, machine building, chemistry and petrochemistry, light and food industries. Also, the Yugoslav firms ACM Zagreb and Agrethe Romanian-Cuban economic

ver cars and tractors sold with great success in the Yugolavia market. As an example we me-tion that uptil the pressi-Agrosproma bought over the tractors from Romania.

tyres, chemicals for hand, use, while Arpimex will de-substitute leather about

In conclusion, our called in conclusion, our called in the equally factures of the continuation of the called opinious about the Rainian exhibits were experted to the continuation of the continuation of the continuation and spoke high at the quality and technically at the Romanian-made probability as of the attractive with which they were put on wat the Hayana International Fair.

at the Fair.

The quality, technicity and reliability of Romaniaa pedicty in the Bornania pedicty made them be remarked by Yugoslav specialists who visited the Romanian stand. Among the praised installation and Items there were feel principles and incomputers, by sofs, mast levialinations, microscopes and levicing. beartngs.

hearings.

Naturally, the (cchulcian' interest in the Romains goods also drow the attestes of business people, which wis materialized in the conclusion of important experi conisate. Among them there are last stipulating the delivery of it sets, electronic components bearings, claumical products paper, a.o. to the Yugelly market in 1988 and 1887. The Zagreb International Fair, was a good queaglon to allowist commercial relations both ways, as on that occasion, but ways, as on that occasion, but ways, as on interest of import confracts ways rious goods among which means, bearings; coke, isotate, the commercial product by Romania for various goods among which means, bearings; coke, isotate, written given the commercial ways, as the continuation of the made of continuation delivery the continuation of the made of continuation delivery written goods.

port, Electronum, Tehnolmportport, Electronian, exportimport export. Electroexportimport and others. The technical permotives, front loaders, conveyors, etc.

Besides the technical success, the Romanian participation in the Sydacy '88 fair was a good opportunity to expand the commercial ites between the two countries: the main cafegories of goods riveling the businessmen's attention included tractors, ball bearings, machine tools, chemicals, various consumer goods which were the object of export contracts. and others. The technical performance of the Romanian exhibits and the design of the stands won the experts' and the callors' high appreciation, which was actualty mirrored in the pages of the Australian publication Daily Exhibition News, which included information about the Romanian pavillon in three of its issues.

issues.
Enjoying great interest with

FIRST-TIME PARTICIPATION

The Romanian-Cuban economic links have seen an upwards, dynamic course, in the engoing try, Romania for the first time mic links have seen an upwards, dynamic course, in the engoing 1990), the volume of muinal de-Riveries is to grow by some 20 per cent over the 1981—1985 (1-

gure. This increment is based on the boosting of inutual exports and the expansion of bilateral cooperation. Of the main Romanian goods present on the Cu-ban market we should mention oan market we should mentian tractors, tipper lerries, trucks, tankers, utility vans, ARO silitarian care, dredging rolls, institute combustion engines, electric maters, machine tools, equipment for edment factories, pacumatic apparatus, welding installations, refrigeratius, recentling matic apparatus, welding installations, refrigerating accessories and installations, bull bearings, amusical instruments, farpets, glass and ceromic-ware, metallurgic products, chemicals, cosmotics and bharmacsutbals, motics and bharmacsutbals, motics and bharmacsutbals, wishing to find new ways of beasing the bilateral comonidates, to calabian direct contacts with the Cuban and users of try, Romania for the Havana attended this year the Havana International Fair at which it was represented, as part of a national pavilion, by 13 foreign

trade enterprises.
As siressed by Octavian Mosr-As siressed by Octavian Moarcas, director of the Enterprise for fairs, exhibitions and advertising for foreign trade, director of Romania's payillon at the event bested by Cuba's capital, "fine Romanian offer at Hayana '88 included products already enjoying a good renown among the Cuban beneficiaries, as well as a number of novellest likely to arouse the Cuban experts' and denters' interest. An eloquent example in this respect is provided by the Romanian stands exhibiting motor vehicles and ears, which have already won the appreciation of experts in the host country in the TV 35 Cir value occupant with a DIST enging and ARO I. S. (Iff to francounts useful load of La food wilds has secured. Hie Gold Migdal. "This statement is backed The photos feature aspecis from the Romanian pavilions at the

collaboration.

fairs of Sydney (top),

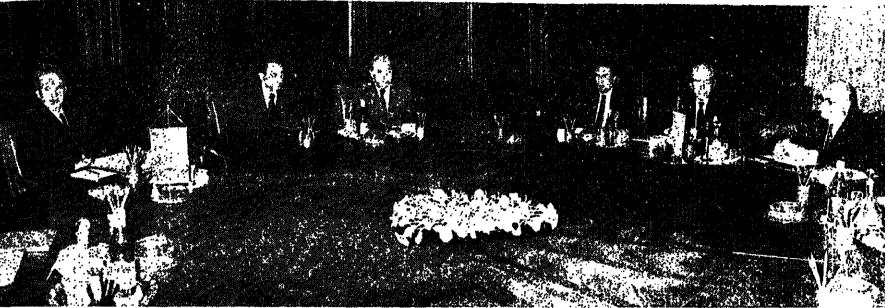
ticipation in the Havana Inter-

national Fair was a real success likely in open up new vistas for

Zagreb (centre) and eic. Page writing W. T. NITESCU . Havana (bottom).. firms ACM Zagreb and Agrooprema presented the public, the Romanian ARO land ro-RUMANIA 20 2115 24 to A PERSON SERVICE SYSTEM THE 110 An Service Co 1. A. .

ROMANIAN NEWS

FRIENDSIMP AND COLLABORATION



for the Vienna Conference on disarmament and cooperation to end with the best possible re-suits, which should consider tha

Kuropean people's interests to live in peace, to closely cooperate in all areas for the inde-pendent development of each one. The approach to problems

should take today's realities into account — the development of the forces of production, of science, of culture. All peoples whatever their social system

should order their lives by tak-ing these advances into account, look ahead, not back. It is in this spirit that we regard—the

her ways and possibilities of her ways and possibilities of further developing the fine Romanian-Yugosiav ites.

During the talks, opinions were exchanged on the development of bilateral relations on multiple planes. In that context, stress was laid on the positive course of the Romanian-Yugoslav links, and it was assessed that the growing economic potential of Romania and Yugoslavia provided broad possibilities to expand cooperation in iles to expand cooperation in production and production spe-cialization, cooperation in the technical, scientific, cultural and

terminal, scientific cultural and
other domains, Just as to incre200 and diversify trade.
In that respect, Nicolne
Ceausescu and Rult Dizdarevia
docided that the members of
the Joint Romanian-Yugoslav the joint Romanian-Yagoslav governmental commission of reconomic cooperation examina tangible modulities of more, powerfully boasting economic cooperation, in the spirit of the orientations and understandings tracked at top level.

The Romanian-Yugoslav relations, just like a series of ma-

tions, just like a series of mu-jor topical international ques-tions, were approached also in tions, were approached also in the addresses made at the offi-cial dianor offered in honour of the Yngoslav guest. In his address, the Romanian head of siale assessed the distinguished Yugoslav guest's visit as anoi-ber relevant expression of the traditional bonds of friendship, solidarity and cooperation bol-ween the two countries, parties and peoples, as an expression of the common wish and will to take the Romanian-Yugoslav

to take the Romanian-Yugoslav relations to a higher lovel.
After mentioning the highly important rote of the meetings and talks with Josip Broz Tito, with the other Yugoslav party and state leaders, in the development of these relations, the

President refered to the current official talks during which, he said, it was noted that there were many possibilities to further expand the political, economic and technical-scientific collaboration between the two

countries.
Approaching international is-sues, Romania's President said among other things:
The situation in the world

continues to be very serious and complex. Even though po-sitive steps have been taken in the direction of disarmament and detente - chiefly as a result of the agreements on me-dium and shorter-range nucleur dim and shorter-range nuclear missiles that the Soviet Union and the United States signed— they are still small. The rema-lning huge quantities of nuclear weapons can destroy mankind soveral times over. Nuclear tests are going on and work is in progress on the shoulled

tests are going on and work is in progress on the so-called Star Wars project.

Under these circumstances, Romania takes the view that disarmament, nuclear disarmament first and foremost, the defence of the people's right to existence, to peace, to a free and dignified life are essential today. Everyting possible must be done for the Soviet-American accord on the climination of medium and shorterrange missibles to be fulfilled, nation of medium and shorier-range missiles to be fulfilled, and for the agreement on a 80-per-cent reduction of strate-gic nuclear weapons to be con-cluded as soon as possible. Furthermorp, offorts should be stepped up to achieve a com-prehensive disarmament pro-gramme leading to the climi-nation of nuclear weapons, eesgrainte leading to the Colornation of nuclear weapons, eessailon of nuclear tests and the
militarization of space. We
strongly support the liquidation
of chemical arms and substantial conventional arms cuts under strict international control.
Romania has been an active

goldations.

In consideration of the deterioration of the world economic life, the steady erosion of the position of the developing countries — which, through a very unfair economic and finan-cial system, actually finance the cial system, actually france the developed capitalist states—Romania takes the view that an international conference about be called to discuss underdevelopment, including the very large foreign dobt of the developing countries.

We true that the progressive, realistic forces, people overy-where, taking action in unity, can change the course of dovelopment, Intense disarmament, ensure a new, democratic policy; cooperation and peace, the speaker said.

In concluding his address President Nicolan Cenuyescu stressed that Romania would work also in future — with Yunania and the address of the said of the s lopment, Introse disarmament

goslavia, and the other socia-list countries, with all the coun-tries of the world, with the demacratic parties and forces everywhere — for the settle-ment of all problems of concern to monkind, for our planet to be a better and more just place to

question of European unity t a united Europe of free, indepen-dent nations, of peace and a better and more just place to live in.

In his turn, the Yugoslav guest assessed that the practice of meetings held, as a rule, the end of every year each time offers a welcome apportunity to conduct talks on the evolution of the relations and the promotion of the bilateral collaboration just as on other topics. As a whole, this mulually rewarding collaboration has confirmed, along the years, the justness on the bases of which our relations are grounded. The equalrights, mulual respect, good cooperation.
Romania works along with Yugosiavia, with other states, tu make the Bullians a zone of peace, cooperation and good neighbourhoess, free of nuclear and chemical weapons and of foreign military bases. We also foreign military bases. We also support the creation of such nuclear and chemical-free zones in Central Europe and other parts of the world.

Romant: bas steadfastly campaigned for the settlement of all conflicts and disputed issues—in the Middie East, Africa, Asia, Central America and other parts of the world—by political means only, by way of negotiations. rights, mutual respect, good neighbourliness and the open approach to all questions of

approach to all questions of common concern, the observanre of the own paths of domesito development and internationat activity, which were starting points and jointly-adopted
principles as early as your nectings with President Tito, Itali
Dicdorevic said, have withstood
the test of time, becoming a
solid base for the stable deveiopment of our ites.

Ito them voiced his belief that
this visit to Romania too would
contribute to the favourable expansion of collaboration in all
fields, taking into account the
advantages offered by the type

ficids, taking into account the advantages offered by the two countries, geographical neighbourhood, by their development needs and the complementarity of the our economies.

Referring to the positive exchanges taking place in the Balkans, Raif Dizderevic stressed that the first ministerial

Balkans, Rait Dizarevic stressed that the first ministerlal moeting of Bolgrade can rightly be considered as historic. Starting from the manimous decision to convene it and continuing with other moetings attended by all the Halkan countries, as well as with the realization. of other palpable agreements, we are now witnessing the development of bilatoral and revelopment of bilatoral and revelopment of bilatoral and revelopment is determined to the balkans. Everyone is determined

sional collaboration in the Barkans, Everyone is determined to continue and bermanenty expand a process which has started successfully and which wint overyone multiple advantages. The Yugoslay quest highly appreciated Romanity tole hid contribution to this positive evolution of inter-Raikan relationships.

Approaching other microational is an analoguies, the appearant in the international relationships. Detents is an analoguies from the international relationships. Detents is considerable and we can derese the prospect with the distribution of the prospect of the distribution of the prospect of the distribution of the considerable and we can derese multiply elder reports and delatoration without the constitution of the convention in the constitution and collaboration strains posses in the additional with convention in the constitution and the collaboration of a large number of sin-lori of a large number of sin-

from the conviction that the relations of multilateral colla-boration and the bilateral ties, the collective and individual security are closely interdepen-dent and that each process has lo stimulate another process in Its turn. An important contribution to

An important contribution to these processes is made by Eu-rope, on the basis of the prin-ciples established at Helsinki. Maybe now more than ever be-fore, it is time Europe and all those flying in it started and achieved even more resolutely the collaboration agreed upon the collaboration agreed upon — an as large as possible collaboration in the communic, technical, technological scientific fields, as well as in that of human rights. And, of course, in parallel with the cliberation from nuclear armanient, a substantial correlational warmany. made in conventional weaponry. We sature the unitateral step recently made by the Soviet Union, which helps open this process. Allow me to note with satisfaction, on this occasion too, the closeness of the Vogoslav and Romanian points of view on the numerous problems of the world relations and of Europe which tulay too have been highlighted by our talks. Stepping in the 21st century, the world will pass into a new age, and we express our hope that it will be much better for everyone, more lasting and stable than the previous ones. In order to be maintained, this positive evolution has to cover all fields of international relationships and all regions of the world. This presupposes the responsible commitment of everyone to seeking solutions to all open problems, which constitutes a permanent source of danger to world peace. I am referring expecially to still latent hotheds and crises, as well as the problematique of international relations are conomic relations. Clobal world relations cannot be established without settling one of the fundamental questions of the contemporary world— the difficult situation of a large number of developing equatries. The conditioning of manking's progress in general and of the selligement of the issues facing the dayleights which have to be taken into consideration.

The new processes at work made in conventional weapoury. We salute the unitateral step

foreign dobt one, in particular, are realities which have to be inked into consideration.

The new processes at work in international relations and the prospects of development in the prospects of development in the world are great challenges for all countries and political movements. Everyone in his way must grapple with these conceptions and ways of action. That is why the non-aligned movement too, as a global independent factor of international politics, buriates to adjust its utilities for the changing infernational problems in the changing infernational problems in the filling laws, principled by the wish to become in the filling laws, principled by the wish to become in the filling laws, principled by the wish to become in the filling laws, principled by the backley processes recorded.

In Endnavor the proposition of the tipe of good neighbouriness, would be pressed the wish at his real the proposition of the tipe of good neighbouriness, friends in a work of the proposition of the tipe of good neighbouriness. In the proposition of the tipe of good neighbouriness, and would be pressed in and would be pressed in and would be pressed in the proposition of the tipe of good neighbouriness.

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A NEW OUTLOOK ON MINERAL RESOURCES . AN ORIENTATION IMPOSED BY THE REQUIREMENTS OF ROMANIA'S ECONOMIC DEVELOPMENT . AN EXAM PASSED SUCCESSFULLY BY SCIENTIFIC RESEARCH AND INDUSTRY . A LONG-TERM POLICY REFERRED TO THE OBJECTIVE SITUATION OF THE NATIONAL MINERAL PATRIMONY . A ROMANIAN SCHOOL IN THE FIELD OF TECHNOLOGIES TURNING TO ACCOUNT LOW-GRADE ORES • DEVELOPMENT MOSTLY BASED ON HOME-GROWN RESOURCES

In the heart of the Apuseni Mountains, two mountains which were apparently determined to defy eternity were chopped down. The peaks of Curmătura (1,205 m) and Ruginis (1,256 m) were shortened by a few scores of meters. And their altitude keeps on decreasing. Several scores of million tons of rock shattered into pieces by dynamite filled the gaps of the surrounding valleys. The mountain rock is removed and underneath lies an enormous deposit of copper ore. A low-grade deposit which nevertheless will provide copper for deposit which nevertheless will provide copper for many decados to come. But in order to bring that copper to light, over 100 million tons of gangue has to be uncovered, transported and deposited in

The over 4,000 people who took to building the Copper Mining Works of Rosia Poleni were faced with a hardly accessible place (over 100 km of road had to be laid out in order to ensure access road had to be laid out in order to ensure access ways) and with difficult weather conditions: long winters with heavy and frequent snowfalls, fog, strong winds and torrential rains. Difficult questions had to be salved concerning the industrial construction and several technologies. Many machines and tools were tested and put to work here for the first time in Romania, as an outcome of the collaboration of many research institutes and machine engineering onterprises.

New an immense amphitheatre opens between the Curmătura and Ruginiş Mountains: the Roşia Poieni Opencut. The mountains have been moulded in steps and terraces providing conditions of safety for the mining works.

The Rosia Poieni mining works and the conditions of safety and poieni mining works.

In steps and terraces providing conditions of sa-fety for the mining works.

The Rosia Poient mining works delivers copper concentries. The ore extracted from the opencut is processed by the preparation plant partially cammissioned as early as 1984. This year, the nei-ghbouring town of Ziatna saw the commissioning of a copper rotining plant.

Does the metal lying in the wamb of the mountain deserve such efforts ?

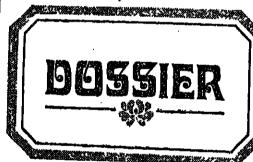
tain deserve such efforts?

Was it really worth while opening a mining exploitation in that place taking into account the enormous difficulties which had to be overcome?

Yes, we can answer affirmatively with all conviction. For the country's economy copper is as valuable as gold.

The spiralling development of certain high-tech branches such as the power and the electronic industry demands an increasingly larger quantity of copper, ireplaceable in the structure of many machines and instruments, copper gets more precious and desperately sought by the hour. The growing need of copper in the world, its inclusion on the list of strategic materials by a series of developed countries have caused its price to shoot up, making it increasingly dear and hard to find. The daring project of Rosla Poieni which in a

The during project of Rosla Poieni which in a few years become the copper mining works of Ro-sia Poleni, has been imposed by the requirements of development. And it proved entirely feasible with the forces possessed by the country's scientific



A NEW MAP OF MINERAL RESERVES

About 40 years ago economic seography guides and lext-books presented Romania ag a country boasting significant resources of mineral substances.

Was it an excessively optimistic outlook? Today we may incline to answer affirmatively, but then it was determined by the needs of the national ecoacomy of the 1950s.

The development and diveraffication of the Romanian economy over the last decades have rapidly chaged the out-

look on mineral riches. Soon took on mineral riches. Soon, the already known deposits proved insufficient: Romania had to resort to imports in order to meet at least part of its need of mineral and energy raw materials.

materials.

But that does not mean we should fall into the other extreme. Remania is definitely not poor in mineral resources;

After making a thorough investigation of the country's aubsoil, geologists consider that Romania is a country abound-

ing in low-grade ores. It has a multitude of noteworthy reserves, yet of a rather modest quality (this is the case of coal) or with scarce contents of metals. In fact this is the consequence of a prolonged exploitation (over 130 years in the case of oil) which has worn down deposits.

Even if their exploitation is carried out in more difficult geological and mining conditions, requiring bigger investments, it is far more advantageous than the import of such materials whose price continues to olimb.

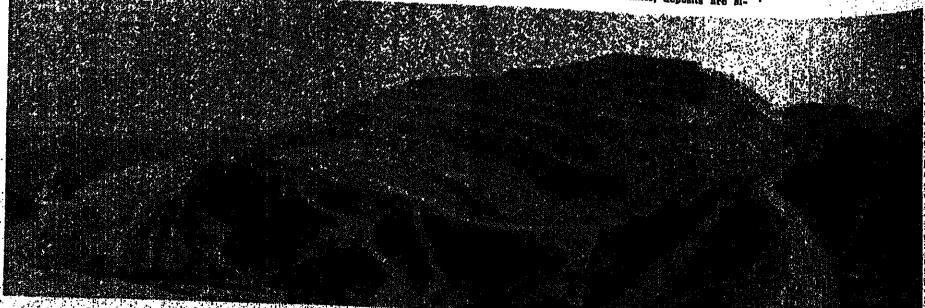
The age of cheap industrial raw materials is over. Everywhere in the world high-grade mineral reserves, (specialists call them "ideal") with a large

concentration of usoful concentration of useful elemonts, located in accessible
areas, which require quite
small transport expenses, less
manpower and ordinary equipment and proparation technolofies have already been assoutted and mostly exhausted.

The potent format formation

The natural factors determining the economic afficiency of exploitation have worscued. Depths are growing bigger, layers and voins are getting thinner, contents of useful cleted in hardly accossible areast consequently, extraollen preparation technologies come increasingly more ton-plicated.

The photos were taken Rosin-Poloni t assembly the ore crusher (top) and the copper openent (bottom).



ROMANIAN NEWS

SUSPENDED CONVEYOR

A new type of conveyor belt has been introduced (for the first time in Romania) and is being generalized in the galleries of the Cimpulung Mining Enterprise. It is the patented invention of engineer Petro Jubuleanu, one of the enterprise's experts.

The conveyor belt has a rigid structure consisting of three 3-m-long metallic modules whose component elements are welded together. Unlike the ordinary type, it is suspended from the celling of the gallery. Below, materials can be stored and people can move without restriction. The modules are kept coupled together and the equipmer. is kept in operation continuously, until the rubber belt needs to be replaced. Through an ingenious roller system, the belt is automatically centred and the risk of deferioration is reduced. The modular structure makes it easier to shorten the conveyance circuit. Substantial economics of manual labour and spare parts are thus made, while the volume of maintenance and overhauling operations is cut.

price of mineral raw materials did little to stimulate the thinking and investment efforts of searching and turning to acsount 'dificult' deposits. But the waste of high-grade ores has caused a receas in exigencies, much for the benefit of previously neglected ex-

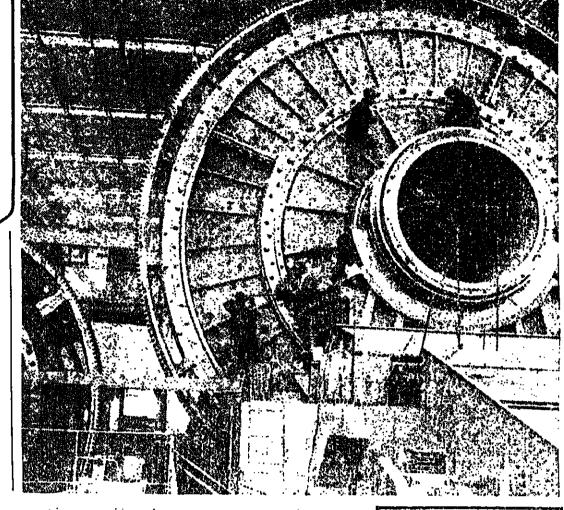
fit of previously neglected exploitable ores.
Doposits "shelved" non-economic and steril two or three decades ago are now reassesed. For instance, exploitable is considered to be also a copper ero with a content of only 0.4 per cent in subsoit and of 0.25 per cent in opencuts. In the past, the world average raic used to be of 3 up to 5 per cent and what was raied below 2.5 per cent never rached the list of reasever. ist of reserves.

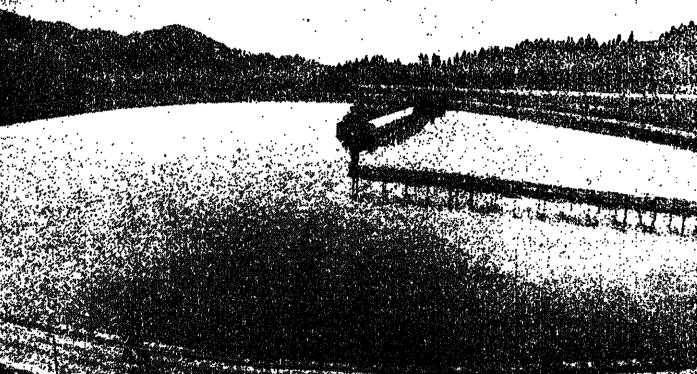
The passage to the use of low-grade and hardly accessible reserves, as well as researches for the scittement of multiple technical and economic pro-blems rulsed by their superior capitalization demand great scientific and financial efforts.

to account.

The rise in the price of mi-The rise in the price of mineral resources demands the
adoption of new conceptions
and practices in their exploitation and usage. All states have
to adapt themselves to this
irrovershite evolution in estabilshing the strategy of their
economic growth and featutheir scientific and financial
efforts adequately and in due
tions.

scientific and financial efforts. Production costs for the exploitation of the existing interest resources have grown. A soveral-times increase has been recorded both by the prices of prospects for the discovery of new deposits and by the investments required by updated technologies able to turn them to account.





COKING

ing Enterprise has started exploiting a roking pit coal deposit. Is ing in south-western Ro-mania, in Mehedinti county, the Bala Nous coaffield was known only for the extraction of fuel coal and of non-metalliferous ores. The only area in Romania from which coking pit coal was extracted was the Jiu

The opening of the new pit coal mines falls in line with the Romanian policy of stepping up the research and capitalization of all resources, the low-grade or less accessible ones included. On the other hand, the breathtaking develop-ment of the Romanian ironand-steel industry has brought about growing needs for raw materials in

A BETTER CAPITALIZATION

throughout this decade, had been drawn up before 1972—1973, when the first symptoms of the world orisis of raw materials and energy were felt.

• Gological researches into some ores of this kind started as early as 1953—1986. At Moldova Noud, in Banat, large quantities of empitive rocks with a low concentration of copper — generically called Banatite — were discovered during scotsical drillings made in 1975 in order to identify copper deposits with a concentration of 5.8 up to 1 per cent (then rated as a minimal percentage is justify the exploitation). At that moment the page copper copper ores of Moldova Mouth held out no significant.

profitable prespect as a mining investment. But taking into consideration the buge quantity, as well as the fact that the respective ores had a constant content of copper, a special programme was worked out for the respectation and technological

programme was worked out for the geological and technological research into such ores.

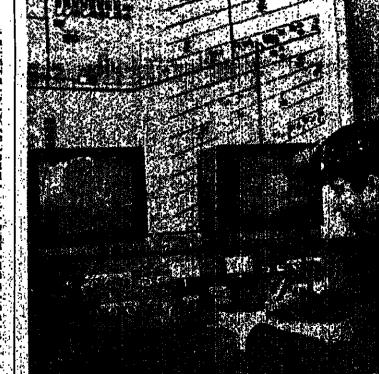
cop-dece, ed And before long, in 1867—1868, time was right for their capitalization, too.

In the 1869, the mining exploitation unit of Legu Ursului came face to face with an apparently unsolvable situation; polymotallic ores with a fine interlocking (galenile with glance, chalcopyrite with pyrito) extracted from the faird erea of the deposit could not be prepared. The mining unit contacted many presigious foreign firms but note of them was able to conte up with an adequate technology. The best

absolutely new technology, licenced as an invention both
here and abroad i ine selectivecollective flotation of finely
concressent polymetalis nonferrous ores. The quality of
non-ferrous metala increased.
The efficiency of the metalite
ore extraction increased, too.
First of all, the technology was
applied at Logn Ursulul and at
Bala Borga, Bul it opened
hroad presucois also for the capitalitation of other deposits.

In 1967—1968 lecknologies for
the preparation of the Banasities of Moldows Nous were
deviced. Faur variable were
concentrations of useful substances. The technology proved
profitable even for log per schilin the conditions of the then
lower cost of son of copper).

In the 10 years which have
passed a school with a riph
extperiones in the field or technologies stirning to accompatow-stode over have been devefoned in Romania.



• The volume of geological reserves has to be large enough
several hundred million
tons. Thus, the poor content duction volume.

• The deposit should lie as close to the surface us possible in order to be exploited in large openeuis with large-capacity equipment. An openeut exploitation provides lower production costs and a soveraltime higher productivity than a pit.

thing higher productivity than a pit.

"O Technologies for the preparation and concentration of metalliferous minerals have to be deviced in due time, allowing of the extraction of useful substances from the ore in the best conditions, as well as of titch recovery with the highest possible efficiency. Account is taken not only of the extraction of a single element, but of

several or all useful elements contained in that deposit: both the main metals of the ore and several other, dispersed metals accompanying them.

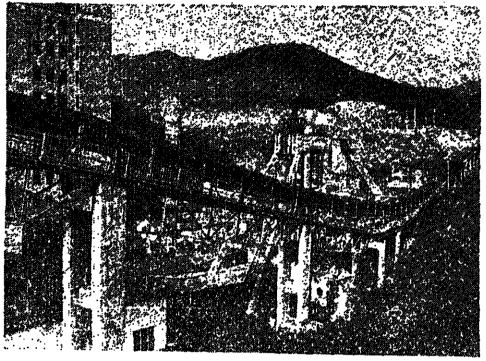
Technological researches undertaken in an integrated conception (through a close collaboration of all compartments — goology, mining, preparation and metallurgy) pave the way for the industrialization of ores. The works which exploit large low-grade deposits have an annual output of millions of tons of ore and the preparation is carried out in large-capacity plants provided with teheinological lines of 5,000—7,000 t daily.

Considerable sums have been



a new gigantic excavator belonging to the family of bucket-wheel excavators built by the Romanian indutry for openeut miners has started being tested. It is the fourth machine of the kind equipping the Mehedin(1 confield — the youngest in this country. A few years ago, the first Romanian excavator of the kind — ERC 1400 — was put in service here.

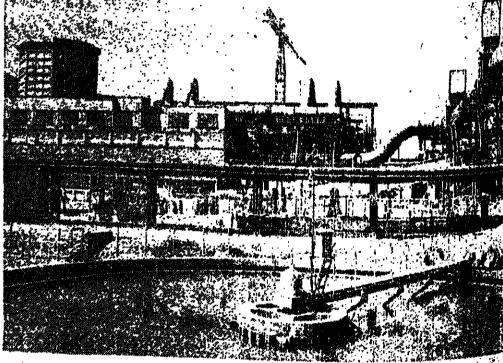
The Mehedinti conflicted has been a true testing-ground for this contextracting plant. And, through their suggestion for improving the machines and enhancing their reliability. for improving the machines and chancing their reliability, the assemblers, engineers and foremen who set these giant going can be considered co-authors of this modern Romanian mining machine. The newcomer in the Husniclean opencut excavator family has included all these suggestions





Until not long ago, lignite layers under two metres thick would not be exploited. In keeping with designs worked out by the Mining Research and Design Institute in Craiova, the Mining Equipment Entorprise at Filipestil de Pädure has built the first two mechanized plants for thin lignite layers (ranging between 1.4 and 2.2 m) in two constructive variants. In the CMA-PL variant, such a mechanized plant has been mounted in the layer 6 No of Leurda mine of the Motru mining works, where it successfully replaces the CMA-3 mining machine. The other variant — CMA-2T — has yielded good results at the Zegujani mine in the Mehedinti coalited, being perfectly adjusted to the specific conditions of ore deposits there. At present, CMA-2T is introduced at the Sinersig mine of the Anina Mining works.





discovery and geological analysis of low-grade deposits. Answering a priority commandment of the national economy, specialists have found and keep in order to turn ores to better account: They create equipment and technologies able to counter-balance the effects of increasingly bad ore conditions. The requirements of the national economy have determin-

mic policy in the field of mine-rals, a long-term not conjectu-ral policy-addressing the ob-jective situation of the national mineral states. Theorem to deminoral riches. Through its de-cisions, it facilitates the intro-duction of low-grade ores in the economic circuit. With every passing year the native mineral substances augment their contribution to meeting the internal needs. Octiain needs have stready been mot.

In parallel with the expansion of the mechanized digging of mine galicries with the help of advancing combine with the help of advancing combine machines, means of mechanizing the assembly of gallery, supports—that is metallic arches and reinforced concrete profabs—have been introduced at the Jiu Valley and Motru coalfields. The machines developed to this end have a holiting force of 500 and took ke

this end have a heiking force of 500 and 1,000 kg.

Recently, a gaugue dumping machine has been introduced as a national first at the Lupcaia openeut of the Motrumining works. The machine, having a 170-m dumping arm, has already yielded good regular, The dumping machines used in openeus so far had a parely 90-m long arm.

The introduction of this machine to by 7 km the distance on which resulting from the uncovering of the arc transported. This accounts for contreduction of transporting and becomes

set by the Ninth Course of the Romanian Communication in the Romanian Communication in the Romanian of the Romanian Inc.

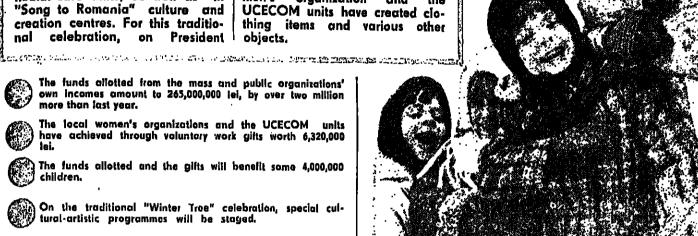
For a few months new at interpretation of the Moire Mining Enterpretation of the Wilipesill deradure, mind the Wilipesill deradure, mind the Will have country, the supporting operation galleries baye best faction galleries baye best faction galleries baye best faction of fastening the coul fact that all nized cutting machines provents its nized cutting machines provents its nized cutting machines provents its nized cutting machines.

ROMANIAN NEWS

HOLIDAYS WIFIER SCENERY

Over December 28, 1988 - Ja- | Nicolae Ceaușescu's proposal nuary 3, "Winter Tree" celebra-tions will be organized in kinder-gartens, schools, enterprises, instigartens, schools, enterprises, institutions, farming units, cooperative farms, children's homes, children health-care units, as well as in "Song to Romania" culture and "Song to Romania" culture and "CECOM units have created clocreation centres. For this traditio- thing items and various other nal celebration, on President objects.

adopted by the Executive Political Committee on December 9, the



A NOVELTY FOR HIGH **SCHOOLERS**

holiday camp for high A holiday camp for night school pupils is due to be opened at Caprinara, Dimbovita county this year, we were informed by Gabricia Pohoata, from the tourism department of the Central Committee of the Union of Communist Youth.

The new camp, endowed with the adequate equipment for a winter spa, will be able to host two batches of 400 pupils each. The campers were recruited from all over the country on the basis of their results in school contests by subjects and in the pupils' sessions of scientific papers.

They are expected to hold heated delates on controversial scientific themes for which they have already shown real aptitudes.

Similar camps will be organized in parallel in the other countles, too.

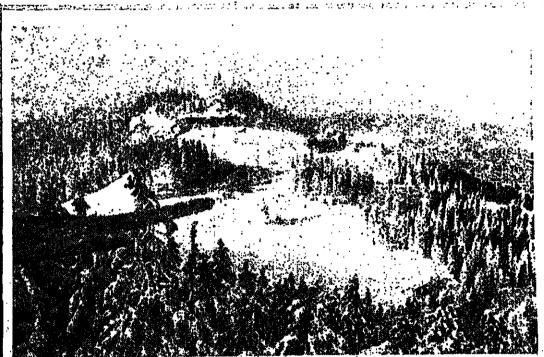
Moreover, holiday clubs will be opened in high schools and cultural establishments.

THE CHILDREN

Voluensa resort in the Loira Mountains (Sou-hern Carpathians) has recently become a time host for holidaying children.

As professor fullan Ghitescu, commission—head within the National Council of the Pioneers' Orga-uization, told us, Voluensa will be this winter too a centre for the all-country informatics camp. For Volucasa resort in the Lafra Mountains (Sou-thern Carpathians) has recently become a line host for holidaying children.

As professor Iulian Chitesen, commission—head within the National Council of the Pioneers' Orga-nization, told us, Volucasa will be this winter too a centre for the all-country informatics camp. For this purpose electronic computers and the necessary programmes have been acquired for a large number



LAST MIMUTE NEWS

On the traditional "Winter Tree" celebration, special cul-tural-artistic programmes will be stayed.

In Bucharest and in county seats "Children's Townlets" will be set up. Carnivals will also be organized.

playing the most valuable works achieved by children — drawings, paintings, sculptures, black-and-white —, and contests

of songs and poems, porfor-mances and various other cul-tural-educational activities will

The measures and activities

related to the "Winter Tree"

celebration once again reflect

the concern with rpising and

educating the country's younger generations, with providing all

Romania's children with ever

better living and learning con-

be organized.

The county youth and children organizations, together with school inspectorates, will provide, on a local plane, for the useful and pleasant spending of the pupils' and students' winter halidays. With the

support of people's councils,

rest and training camps, holi-

day clubs and trips will be or-

ganized and sports contests will

be held as part of the winter

stage of the Dacinda sports

In the period preceding the

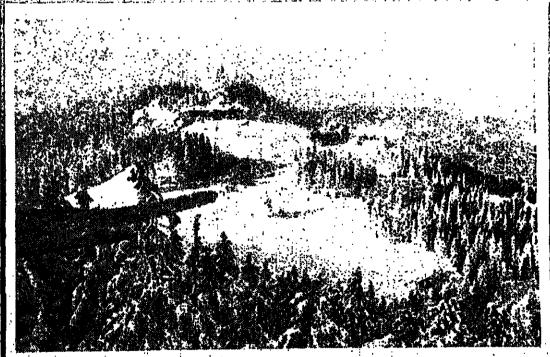
"Winter Tree" colchration, exhi-

In Izvoru Muresului, Piriui Rece and Cimpulung Mol-doveness resorts skiing lessons will be offered over December 17, 1888-February 28, 1989 by instructors cer-tified by the Remantan Skiing and Skating Federation, Both young people from Romania and those coming from abroad can enroll in these courses which last seven days each, Each series of lossons ends with a competition, The top three placers will be awarded prizes. The others will be happy that they can ski and receive the BTT badge.

Natural skating rinks will be created during the winter holidays, weather permitting (so far, the signs are

A special camp will simultaneously be staged at the Cimpulung Moldoveners complex, which will schedule compolitions in the main season sports alpine skiing, cross-country skiing, binthlon.

Ecach resort will feature lis own special artistic and discotheque programmes, and the traditional youth's New Year's Eve parties.



LAST-MINUTE NEWS

tala resorts will comprise some 50,000 schoolchildren under 14.

During the winter inclidant, camps by various subjoets of study will be organized. Apart from specific winler recreational activities the children in those camps
— who are the best at the respective subjects — will be
given additional framing with a view to their participaflow in the higher phases of the mathematics physics
clientalry, Bomanian language and flictature, instery eleschool contests. Very much as in past years, the future
winners of international school contests will probably be
solded from among those children.

Two hundred thousand children will so on trips to the Prahovs Vollos and other mountain restens.

Holiday clubs will be open in all general schools. Their programmes; drawn up according to the children's profession in advance; copinin many attractions; justifico-objectific according attractions; justifico-objectifics.

i the helifich stall presented at the Palace of Plag-neous and Momelands belones in Ductares, children will reers on over 140 solicities calls.

The Paris of the State of the S

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** stroko length — 2,500, 2,000, 1,500, 1,200, 900 nm • work speed — 15 double strokes per minute.

CONVENTIONAL PUMP-ING UNIT WITH RE-VOLVING COUNTER-BALANCE according to AT/11 E slandard • stroko length -2,185, 1,845, 1,500 mm • maximum work speed 20 double strokes per minute.

8—12 LONG STROKE PUMPING UNIT AOTIVATED BY FIEXIBLE ELEMENTS, This unit (original paient) is meant for oil extraction from deep and very deep ple and has high reliability. It has a one-day operation prin-ciple (it does not require a change-ever switch).



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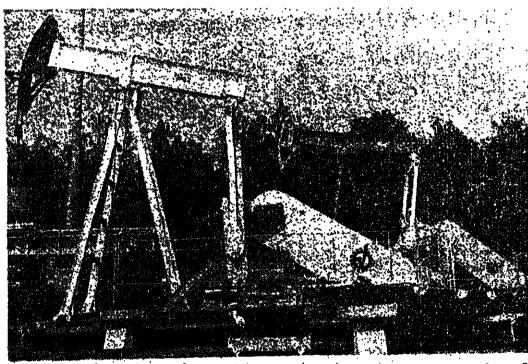
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llaving a high technic-scientific productive po-tential, Vuican Enterprise tential, Vulcan Enterprise is ready to contact other specialized firms with a view to implementing mutually advantageous joint ventures based on its own or the partners' documentations, the respective designs and documentations being included in international standards, VULCAN guarantees the carrying out of contracts in the dards. VULCAN gnarantees the carrying out of contracts in the best conditions. These affirmations are cloquently supported by the excellent cooperation relations our enterprise has with firms from the GDR, West Germany, Egypt, India, Pakistan, Philippines, Czechoslovakia, Turkey, the USSR, etc. Falling in this line is the execution in this line is the execution of sieum bollers with a flow of 1,035 ton steam/hour after BABLOCK-WILCOX floored





- Yulcan =

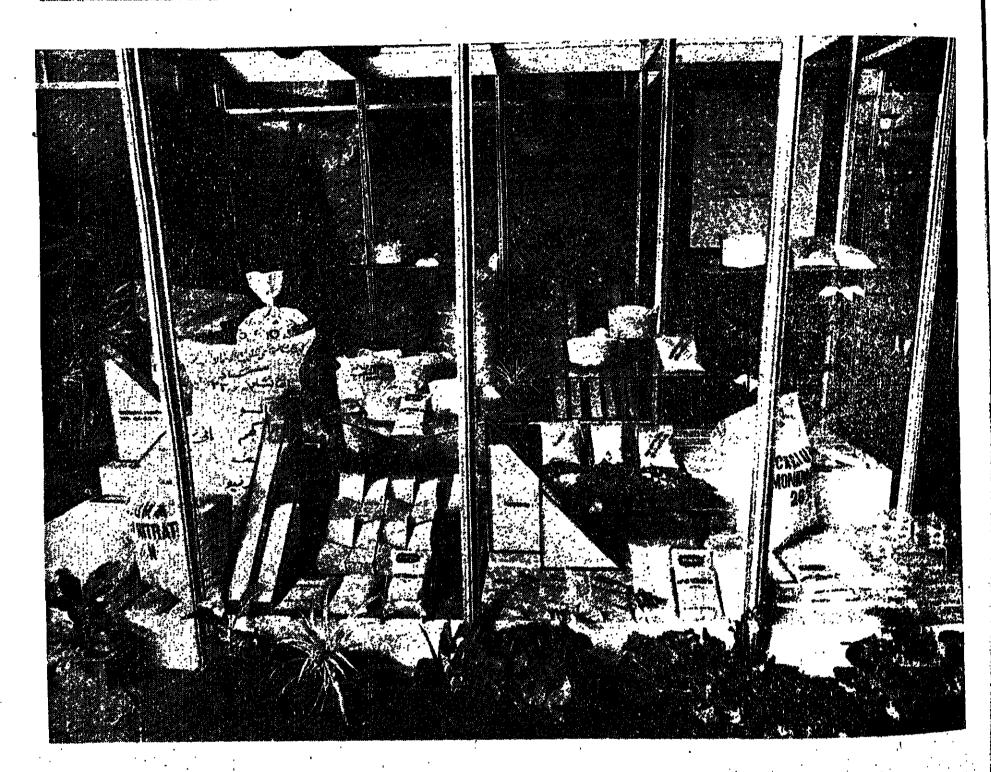


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- Measuring and control apparatuses, of which ampermetres, volimetres, wattmetres, electric metres, flow-metres, steam-flow metres, logometres are delivered to Poland, Syria, Iraq, Pakistan, Sudan, the GDR and Czechoslovakia.

- Automation elements, equipment and installations for all the economic and social sectors. We shall enumerate some subgroups of pro-

ment, teletransmission and data processing equipment, machine tools, control equipment automated testing equipment.

Also on offer are personal installations and equipment as well as turn-key deliveries. Increasing are the deliveries to countries such as the USSR, Egypt, the GDR, Czechoslovakia, Iran. Irag, Bulgaria.

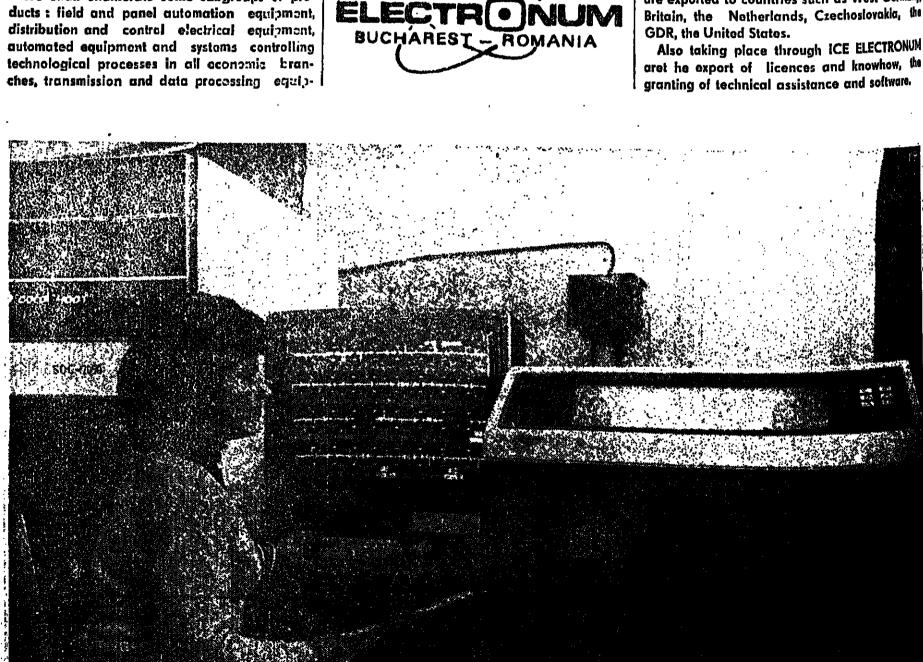
- Computer technology equipment such as: medium-capacity computers, minicamputers, mlcrocomputers, personal computers, graphical systems, invoicing and bookkoeping machines, peripheral equipment. These products are exported to People's China, Czechoslovakia, the USSR, the GDR, Switzerland, Austria, West Germany, the USA.

The electronic components cover a wide tange of diodes, transistors, integrated circuits, resistors, condensers, etc and are exported to Bulgaria, Czechoslovakia, the GDR, Poland, France, Italy, the United States etc.

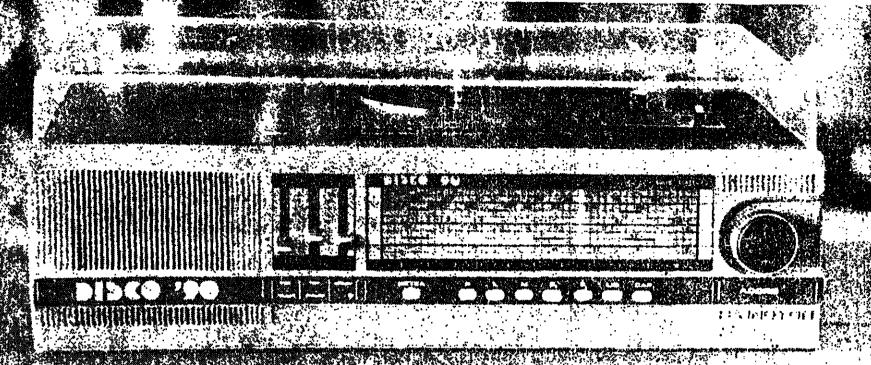
Consumer goods such as radio receivers, radio cassette recorders and tv sets. These products are exported to countries such as West Germany, Britain, the Netherlands, Czechoslovakia, the GDR, the United States.

aret he export of licences and knowhow, the











ports a series of equipmont, apparatuses, electronic components and various materials for the electronic industry and audin-video consumer goods.

An important partner in the export and import condusted by ICE ELECTRO-NUM is the Soviet Union.

ICE ELECTRONUM -Bucharest collaborates with the Soviet enterprises Y/O **ELECTRONORGTEHNICA**, V/O STANKOIMPORT, V/O MASHPRISORINTORG, V/ O TECHMASHEXPORT. ENERGOMASHEXPORT, V/

O TEHNOINTORG, V/O Supplied to the USSR are adjustable drives for machine tools, automatic telephone exchanges, computer technology, while that country exports to Romania electronic components, technological equipdustry, computer technology and audio-video consumer goods.

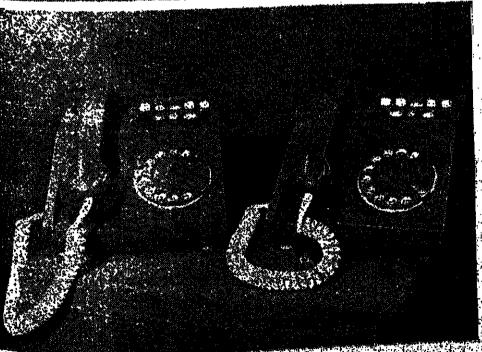
The collaboration with the Soviet foreign trade entorprises also accounts for the cooperation in production, that is Soviet electronic components are used in manufacturing electrical drives, computer technology equipment and automated telephone exchanges to be delivered to the USSR. At the same time very important is the ob-

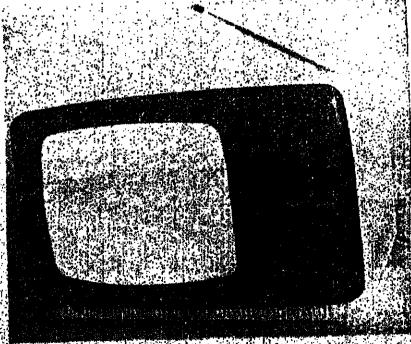
servance of all delivery dates, especially as concarns the electronic components which are vital to the rhythmical realization of the equipment production plan.

According to annual mutual exchange protecti stipulations, the volume of the exchanges but took ELECTRONUM and the 50viet foreign trade enterpris ses is set to grow every

For further information please contact our specia-







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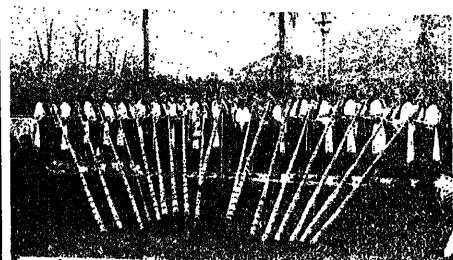
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FOREIGN TRADE ENTERPRISE . ROMANIA . BUCHAREST

Z ARMATA POPORULUL BOULEVARD PHONE: 313751 WILLEX 11195 C CONF R

The seventh Song to Romania National Festival mass-wide stage is drawing to an end this month. Since October 1987, the mass phase has offered a simulating framework for the assertion of new tilents, for the promotion of original literary and arity-lie creation, of selentific research, registering a permanent development and diversification of the content and forms of the political-educational, scientific, icolnical and cultural-artistic work in villages and towns. As part of the mass stage, all counties, economic units and cultural establishments have organized debates, exchanges of experience, expositions, symposiums, meetings with specialists in production, laying stress on the expansion of initiatives, on scientific and technical creation.

During the first stage of the ongoing edition the number of artistic ensembles has risen substantially, being a leiling proof of the climate of creative emulation generated by the festival. Presently, over 231,000 artistic formations and workshops are taking part in the festival, engaging over five million participants. (Photo right)



A large capacity station for the production of blogas out of
muds deriving from urban
waste waters has been
brought into operation in Siphipara municipality. Nearly, n lernut commune, another blogas dejections from a astallation converts into arge pig growing and feed-

ECOLOGY

In fact many state farm units and cooperative farms are concerned with luming non-conventional energy. In Afteres county alone there are 60 installations for the expandly equals 2,000 1 of conventional fuel. The ecomule advantages of these installations are doubled by the beneficial ecological ef-fect of substantially dimini-

CHALET

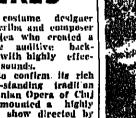
FOR TRIPPERS Slied at an altitude of ap-

proximately 1.500 m, the Poiana Izvorelor chalet of the Buccel Massif Is a welldescried stop-over for any tourist after (we hours' glimbing on mountain paths. Moreover, it can accommodata travellers for a longer resque sight providing also s sthenie cure of quiet and szonated air, (Photo right)



CLUJ-NAPOCA PREMIERES

PROHECTI





The hydraulic equipment and tools enterprise in Forsani is one of the newly-built industrial un't; of Vrancea county. In the hydraulic elements department (photo below) a new Romanan-made nutomated processing technological line is turn'ng out parts for high-tech nucchines and equipment.

impresses through both its capacity of processing highly alloyed steeks and its sizes — 10,730 mm in length, 2,240 mm in height and 3,120 mm in width. A giant whose performances are nevertheless controlled and guided by the control panel attached to it. (15 lots below)

SPORTS

Romania's men's handball champions S'erun Bu-charest best Denmark's champion team J.F. Kold'ng 23-21 at home and 23-21 away and went through to the quarterfinals of the European Champions' Cup. In the, women's competition, Muresul Tirgu Mures won 28-15 the away match against Turkish team Ar-chelik Istambul, after having outclassed them at home 27-5.

chelik Istambul, after having outclasses them at home 37-5.

In the Cup Winners' Cup, the men's team Dinama Bucharest lost the second leg (away) of their tie against TSKA Moscow 21-23 but had defeated the Soviet champions at home 22-17 and thus atrode into the quarterfinals. In the women's competitions, Stilinta Bacau (rounced Turkish team Belediyes Izmir in both legs — 38-17 at home and 33-18 away. Following their two-leg win (29-17 away and 21-18 at home) over Swiss team St. Gatten Politcheica Timispora went through in the IHF Cup. Minaur Baia Mare were sent out of that competition by Hainafjader of Iceland.



IN DECEMBER

Some five million nursery (tausplants of tamaines ard being prepared
in the hothouses of the
Vogetable Growing Rekearch and Product on
helituic at Vidra, neur
Bushwest, Henlanted under the glass sky of
other hothouses, they
will yield fruit, despite
line calandar, in the
dupth of whiter. In Romania, the surroundings
of must large few a
shelter, hethouse enterprices:

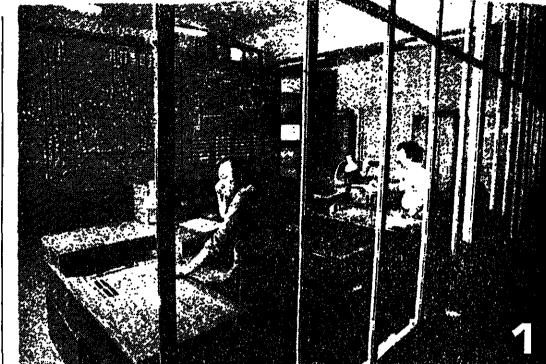
a ROMANIAN ROMANIAN

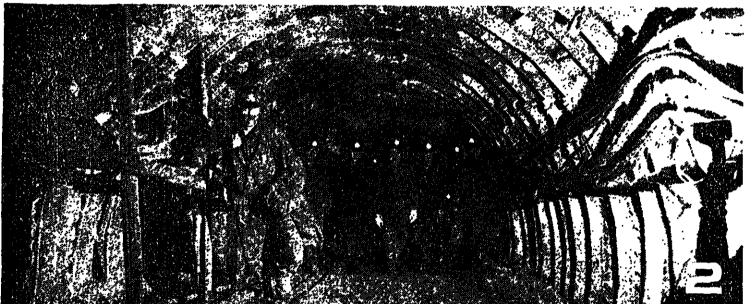
RCMANIAN

An enthusiastic decipherer of the human biological

The Jiu Valley is Romania's leading coalfield, through both its size and the quality of the coal extracted from there: pit coal -

the raw material for metallurgic coke and fuel coal of up to 4,500-5,000 calories for thermal power stations. In the underground galleries of the 13 productive enterprises of the mining works operations are conducted





View from the con-trol room of the Lu-peul Mining Enterderground.

At Lapent, one more day of fruitful work





View from one of the lecture rooms of the Mining Institute in Petrosani, Here, highly skilled experts are being trained for the mines in the Jiu Valley and the coalfields in the

Mechanised outling machine in a large working face at Lupeal, where the Mining Enterprise, the biggest sup-plier of coking coal in the country, boasts a high meanization degree.

A forest of under-ground hydraulic pil-



prise. The personnel on duly monitor on tv screens and on the flushing maps of the galteries and mine fa-ces the production flows, the running of conveyor belts, the niring installation, keeping permanently in touch with the men un-

has been completed. The miners conclude their shift with the feeling of fulfilled duty: they have several thousands

GENETICS-MEDICINE

"The breathiaking accent of genetic engineering proved to be beneficial to man, meeting, from the very beginning, the acute needs of medical therapentics. Through the geneticisis' creative power, the bacteria have started producing insuline, which is so necessary (for the time being) to diabetics. If ore is another example tuntil not long ago, hypophyscal human growth hormone, quite difficult to extract. Genetic engineering stepped in, synthesizing the growth hormone which, beyond its immediate utility, filled a void left by the researches of the great pharmaceulical companies. Several chromosomal syndromes have been identified. In the year 2000, the three bittion components of the human genome will be defermined. Then we shall be there inderstand why we are what we are, why we are happy or sad, why everyone interprets the world in the own way. It is a fascinating prospect for a special supposed to the different of the sum way. fasolnating prospect for a peoles which was just recently

The entry of his name in the Who's Who in Science and Who's Who in the World, the first monograph devoted to enderthe genetics in the world, the discovery and description of seriain syndromes — included in international catalogues of hereditary discuses — recommend Coustantin Maximilian, MD, as a prominent figure beyond the country's borders too. His record also comprises over 200 articles published not only in Romanian specialized magazines but also in foreign ones such as Jonand of Medical Genetics or Acta oxologica,

ones such as Journal of Medi-cal Genetics or Acta oxologica, Ills meetings with numerous scientists having the same spe-cialization at international con-ventions or as a schol riship holder at various genetics insti-tutes in the USA or Europa convinced the Romanian scien-tiat that people on all conti-nouts are worried by the same questions about themselves. It

noits are worried by the same questions about themselves. It was from the responsible involvement that his book of essays Un genetickin priviste lunca (A Geneticki is Looking at the World) was born. The title, which suggests the author's profession of faith, guided the entire itinerary of my dialogue with Constantin Maximilian:

"Should you resort to a con-

"Should you resort to a com-parison, to what would you compare the advent of genetics as a science?"

"With the discovery of fire!

"A confrère of yours, Marcel Sendrell, who resembles you through his specialization as an endocrinologist and his virtues of an excellent siylist noted,

in his book Sagesse et délire des fermes (also translated in Romanian) that the serpent has never before hissed so loud in our ears: "You shall be like gods !" The observation, or maybe the warning, refers to the mutations determined by man by subjecting the chromosomes of the reproductive cells to prifficial aggression. Do you

to prifficial aggression. Do you share this opinion?
"The answer is more difficult. Genetics continues to be a permanent wonder. However, we can no longer be concerned by its advances alone, but also by their social, moral longact. Because an apparently harmless line of research can branch out and one of its branches could have devastation correquences— purposefully or accidentally. Not so long ago, manused to be an intangible being but here we are faced by aphlevaments forcing us to reconsider life, When does it start? In the precise moment of foundation or later? Do we have the right to experiment on an embryo of it in embryo is an integral being, any casearch is tentamount to a grime. But without tests, the beginning will never be cleared up. The new embryology is indeed playing with life.

IS LOOKING

destiny, my collocutor seems to ignore - or maybe he just does not care - that his name is a notorious one. And yet it is precisely the humanist side of his researches that earned his fame : the works of medical human genetics and cytogenetics, the first in this country, which he has published since 1967 and, even earlier than that — the volume Introduction to Anthropology (in collaboration) the first work of the kind in the specialized Romanian literature, or the Paleoanthropology Monograph - Sărata Monteoru, which has earned him the Prize of the

Academy of the Socialist Republic of Romania. The author of over twenty scientific books, he is well known by the Romanian public thanks to the scores of Iv or radio broadcasts whose guest he was.

way, at that. Nobody (magined that Huxley's Utop'a would one day become a reality. The late '60s saw the publication of T. Taylor's Biological Time Bomb. Genetics thus became a homb about to explade, Genetic engi-

Genetics thus became a homb about to explade, Genetic engineering was drawing near".

"During the same period you published "The Adventures of Genetics". At that thuo it was an act of courage",

"Yes, those were hot years, sectifing with questions and incertifiedes. Yet an amazing succession of advances which were to transform the planet was heralded. Ever more geneticles left their labs to look at the future. The emotional impact was transcaled. Then a few brougieal breakthroughs exceeding the most scusational anteipations were made nublic. In vitro fecundation shook the world. That was a decade ago. Todey, it is a fact of everyday life. "Let me tell you something. When I left authropology and started working here, at the Endocrinology institute. I feld the world needed a new human biology — starting from different bases and having higher goals".

"Your feeling was quite right. As for in vitro fecundation — should we refer to this alone —, it does not yet seem to be quite an everyday fully acceoled by all. Conventional wisdom warms us not to play with fire. The bomb mentioned in the title of

us not to play with fire. The bomb mentioned in the title of Taylor's book suggests certain fear-provoking similitudes. Is the fear justified?"

say that the absurd alone has the chance to be true. But where does the absurd begin ?*

"As we all know, it once accmed absurd to imagino that
man can live with a borrowed
hoart or kidney. Organ transplants, implantations of electrodes in the brain, the administration of hormones no longer
cause any surprise. But up to
what point can one extend the
scientific slogan 'man changed
by man'?"

accentific slogan 'man changed by man'?"

"The human biological stock can still be improved, obviously in its infellectual or emotional sides. Evolutionism is undergoing a crisia, hard to suspect yesterday. We need a new theory. We no longer roduce transformation to the play of mutitions and of natural selection. Certainly, today man can improve man. By replacing therapies — which in the last analysis are just pulliatives —, one of the paths leading to the perfection of the human boing is to correct the genes, the carriers of hereditary diseases. Falling in this line is the development of definitive therapies. For the time being however, I think that one of the most fabulous hopes of medicine is the synthesis of specific antibodies indispensable for maintaining the body's integrity. As it has done before, genetic engineering will again dely the impossible".

"All humans without exception

"All humans without excep-tion would like to be perfectly hoalthy, intelligent, young and healthy, intelligent, young and handsome for us long as pos-sible. I have recently read to a special issue of La Quinzaine litteraire an article setting forth obtaining supergeniuses. After the model of the giant mice ob-tained through implantations of growth hormone genes, some parents ask doctors to make

littraire an article setting forth some suggestions for the mean future of genetic engineering; endowing man with two mouths, two hearts, wings for those desirous to fly, an additional pair of eyes — at the back... Also proposed is to inject the genes, of attruism — in order to render people more cooperative and thus eliminate social tension —, or genes of social tension —, or genes of intelligence in human embryos in test tubes, with a view to

two metres tall. According to the article, certain biotechnolo-gled firms have agreed to meet

nape ?! The suggestions do not come from tyros. Should we get accustomed to the idea that the human nature will have to be completely change! ? Who de-cides what the 'perfect man' will have to look like?

A MORAL SCIENCE

"Genotics has nover been neutral, not even at the filme when it operated with narve concepts. It has constantly wondered where it should stup lest the world's existence should be endangered. I myself wonder for instance what the world would look like if the wise men decide who should live and for how long. A spelnt stratification according to criteria still rejected by imagination could appear. I do not know if this world will ever come into being, but we are in duly-hound to anticipate the nossible evolution of science. Will it be oberrant to improve the intelligence quotien? A species of gentes... Will it he absurd to eliminate our fears? It is true that the paths of science are unpredictable. But let us admit, for the sake of hypothetical theories alone, that in the end a small population, of supermen will alone, that in the end a small population of supermen will appear. An appropriate environment will have to be created for them. The experiment call for centuries of permanently guided cross-breeding. Should such an experiment take place, all our morat principles would be violated. Who has the right to impose compulsery unions? What for ? What would be the bonefits of this?

"Lest science should abdicate morals, the adventures of ge-

neiles must be rigorously conteolled, both from inside the scientific community and from entitled it. Generally, the risks of reckless experiments can be climinated through the participation of all those a are that science means Jay and sadness equally. I, for one, am other secret, believe in the role of genetics as a shaper of his, And pin my logics on the wishms of our species. "Specialing of hope, it is no secret that a new home of easy. Deutamile seconds of the Roads of Hope), will some be not be for the Roads of Hope), will some be not be for the secret. If will you give a hint as for its topic "".

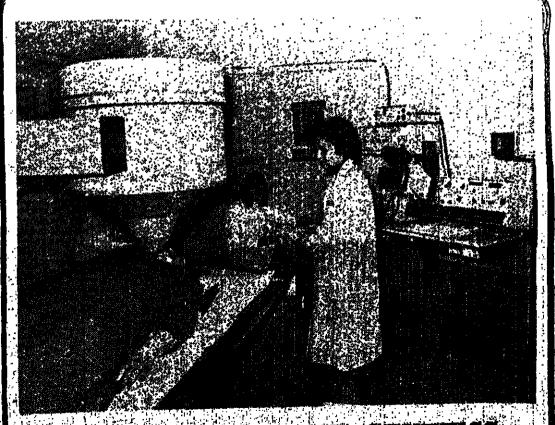
a hint as to its topic?"

"It is not attempt to understand the erowical paths of the human destiny. The predictable and unpredictable sides of our tree.

filter, "What is your most aident

wish as a geneticed?*
"To discover new syndromes of hereditary diseases. I belong to a generation which has tried to impose geneties in Romanian medicine. And to a large extent it has managed. Genetics takes us closer to the essence of hu-man evolution. Genetics will help us better undestand our-selves and the others. Isn't this the great meaning of our exis-

VIORICA CIORBAGIU #



AND GENETICS ENDOCRINOLOGY

thodorn treatment rooms; a polyclinic and se-yerd specialized labs. The highly-trained midical staff bome of lodar's best experts were once I. O. Parhon's disciples, well known shread too, are working day and higher laying to specials, the causes of endo-

In December 1982, the half of the Romanian Athenaeum hosted a festive concert in the honour of Cella Delavrancea, an outstanding personality of Romanian culture — a pianist, writer, music critic, and teacher — on the occasion of her 95th birthady. At the end of the concert, after climbing on stage to perform a few pieces on the piane, the féted artist addressed the audience to thank everyone for their sympathy, adding that: "I invite you all to meet again five years from now, when I am 100". And Cella Delavrancea kept her word. Five years later, in December 1987, she met again with the audience, listened to a concert given by her guests in Radiotelevision's large studie, after which she climbed again on stage, this time accompanied by her favourite discipline, the well-known pianist Dan Grigore, in order to improvise jazz songs and abythms at four hands.

One year has passed since then and Cella Delavrancea has reached the age of 101. Again, in December 1988, she was the point of attraction of a huge audience, gathered in the large studie of the Radiotelevision — eager to witness an event unique in the world: a concert given in the honour and with the participation of an artist who has outlived a century. The soirce began with a few films familiarizing the audience with some of the great personalities of the culture of our century — music, fine artis, literature —, of Romania and of other countries of the world, with whom Cella Delavrancea came into direct contact or of whom she was a contemporary. A short documentary film, reconstituted according to period images, evoked the imposing figure of writer, jurist and orator Barby Delavrancea, the artist's father, after which the screen was filled by Cella Delavrancea herself, as she was filmed while delivering her speech of gratitude



during the December 1987 meeting of the Remanian Academy, when she was celebrated upon her centennial birlinday. A true review followed of great personalities of the Remanian maistal and poetic interpretative art of all generations. Against the musical background mounted by the Radiotlevision symphonic ensemble under the baten of the outstanding conductor Emil Sinnon of Cluj Napoca, who also came to the forefront of alteration diving the performance of Miczarle Zauber-Bills and Brahms' Academica enterprises, the spoilight was ahared, in turns, by the great suprane Rugenia Moldoveanu, violinist Androi Agaston the refused master of the bow, and young Fellcia Filip, a soprano singer of constitura. Among the performence, standing out were also Dan Crigore, the leader of the average generation of Romanian plane players and his pupil, young Delia Paviote. The intervals loft between musical performances were filted by the prosence of the great actors Loopoldina Bilianusk, and lon Caramitra who recited undring verses from Emineseu.

And then Cela Delavrances came on stage, Announces were filted by the prosence of the great programme made up of pages by Chopia, her favourite compasor, she started to play one prelude after a brief programme made up of pages by Chopia, her favourite compasor, she started her "brief" recital is a timed and been at leind of personni "lelimolit". Warming ap progressively, she stretched her "brief" recital is a timed and been at it the beauty of ions, a varied range of buse, the delicancy of touch, the refusal of virtuosity as a goal in the page of touch, the refusal of virtuosity as a goal in the page of touch, the refusal of virtuosity as a goal in the page of touch, the refusal of virtuosity as a goal in the page of touch is the page of touch and the page of the pag



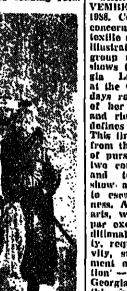
After four features (Good Evening, Irina, The Winner, Lonely on Worch and Confidence), film director Tudar Marascu proposes a new premiero — Miracolul (the Miracole) — about to become a reference event in the history of the Romanian film inspired from today's reality. First of all because it deals with ground-breaking technologies in the field of Romanian agriculture (the transformation of one-lime sandy areas into crop-yielding soils). Secondly, because the story (based upon true facts) is significantly incorporated by the script writers — playwight fon Balegu and the film director himself — into the destiny of those who made and lived the "miracle" of changing the face of that land. Finally, because the film outclasses any previous performance in point of artistic achievement.

achievement.

For young agronomist Tudor Volbea (remarkably interpreted by the untimely shelved Anton Taul), the transformation of the "little Sahava" hundred by devastating sands and enraged winds into a fortile casis is not just a matter of approach (or confrontation with self-complacency) but mainly one of conscience. The het with bimself exceeds the framework of professional ambition, touching the zone of existential convinctions and aspirations. The character is never thred of starting over again, incessantly striving to overcome the vicisitudes of nature and the human prejudices. The film is a remarkable achievement also thanks to the contribution of cameraman Cristian Comeaga, composer Calin louchimesed and scene painter Mireca Totan, all of whom proved an inspired choice for film director Tudor Marascu.



try's independence and sove-



BXPO

of lextile applications, and textile applications, and textile miniatures, created by the Intextile miniatures, created by two different techniques — embroidery on tuite and dependence Museum of Giurgiu municipality. Brancovan's long rule (1688-1714) went down in Romania's history as a highly significant period in the struggle for the defence of the Romanian people's ideals of independence and freedom. A highly affeed ruler, Brancovan encouraged the development of monumental art and Romanian printings. Besides the photographic images of like famility of the fabrics and Romanian printings. An office of place is given to period swords, the Brancovan family's arms and seal, old Ramanian printings. An office is line applications, and the line works in the photographic images of the sonality of the fabrics and swords, the Brancovan family's arms and seal, old Ramanian printings. An office is line printing and refiness and its line presentity of the fabrics works. In the case of the monumental effect is obtained to applications, the monumental effect is obtained not only by the dimensions of the photographic images of the which the precious in the sonality of the fabrics and its words, the Brancovan family's arms and seal, old Ramanian printings. An office is disting the fabrics works, and its branch printing and the minimum and the printing and the and festive exhibitions as well as collec-live exhibitions abroad, having works in private and state collections in Romania, France, Causda, Greece, Belgium and Norway, the young agist succeeded in organizing three one-man shows. Her oreations stand out in all sections of contemporary taposity owing to their marked pictoriainess.

nlans, through his heroic puts on view a rich selection acts of preserving his counof monographs devoted to the ruler and his epoch, starting with that of world-reputed historian Nicolae

ORIZONT GALLERY, NO-VEMBER 29-DECEMBER 23, 1938. Continuing the artist's concerns in the field of the textile arts, which have been illustrated so far by eleven group and five one-man shows the exhibition Gapr-gla Layrie is presenting at the Orizont Gallery these days rounds off the series days rounds off the series of her past achievements and richly and sensitively defines her creative horizon. This lime, fashion is missing from the arise's usual runge of pursuits while the cities. of pursuits, while the other iwo components — laposity and textile in!nintures — show an obvious tendency to escupe from desorativeness. As a rule, the textile arts, which are decorative arts, vertices are accorative to the control of the control par excellence, are the (raditional appanage of tentionity, regulring a fine sensitivity, sublicty and refinement of colour and stylization'— qualities in which Georgia Lavrio excells. But this aspect is clearly overshadowed by the monumental character of the presentation and the semantic content—the message — which the artist's brilliant "decorative" compositions bear. Falling in line with the wide-scope cultural events devoted to the anniversary of 300 years since Constantin Brancovan's ascent to the throne of Walkechia is the between the constanting of the constantin

conformism of the human relationships by means of an artistic appolosus, as an artistic appolosus, as an artistic appolosus, as an artistic appolosus, as a substitution of the status, and we are actually amazed by the moundous throads" and we are actually amazed by the moundous filitared, stained filitared with a framoworks of the will see with a framoworks of the will against the shalling whis against the shalling whis as one of the wall with he exhibition but on view state of the wall they for appoars as an attain in full possession of the same pression making who state are appoars as an attain pression making brobably, many and, brobably, and HADU FLORESOU



The fraditional Yearbook of the Main Musical Dala and Events of 1938 was recently issued at Musika Fublishing House in Moscow, The Soviet researcher Ruftma Lutes, a participant in the recently held "George Enescu" International Symposium in Bucharest, pulliped an ample article on the ed an ample article on the Romanian mezzosoprano Zo-nalda Pully, on the cocasion naida Pally, on the occasion of the sluger's 70th birthday anniversury. After presenting her bingraphy, studies, tours abroad (in the USSR alone sine made 20 tours starting with 1982, appearing on all big Soviet lyrical stages), Ruffina Lutes analysed Zenaida Pally's main creations especially the role of the Spithnx in George Enescu's Ocdip. The article inducies numerous data on the successes scored by the Romanium Singer in the USSR,

CZECHOSLOVAKIA

Albatros Publishing Rouse of Prague put out the translation of the novel Tota pinzele sus — All Salls Up by the contemporary Romanian writer Rada Tufora in Jiri Naslece's version The houte was terred by the Kon

cohanced by the samplaces ness and monumentally of the flyures and their frame-works, by the hierafism of the styllzations. The other is fully coloured by subtle and affuble frony. Here too, the

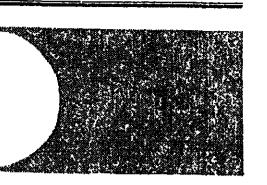


At the Art Galleries of Bucharest municipality, Maria bianeas presents several tapeatries representing in their drawing nature in all seasons of the year. A graduate of the Nicolae Griggertsou" Fine Arts Institute in Bucharest (class of 1977) the tapeatry section, with participations in municipal, republican

ROMANIAN

ROMANIAN NEWS

CHIMICA





GASTROZEPIN

GASTROZEPIN has a great selective ability, showing a strong affinity for muscarinic receptors. The system of linkage of the receptors has special characteristics, different from those of atrapine-type anticholinergic agents. The product blocks the acetylcholine receptors of the parietal cells of the stomach, functioning as an inhibitor of the gastric acid secretion.

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digestive affections due to enzymatic and billiary deliciencies, it is recommended for affections caused by the secretive deliciency of the
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sure of all things" as Protagoras put it, we must stress that the quality of your products and the productivity of your labour are strictly conditioned by the use of MEASURE-ING AND CONTROL APPARATUS.

The post- or in-process sizing of your products supplies you the information through which you can become EFFICIENT as a producer.

If, generally speaking, "man is the mea- | vity, competitiveness) that the Fine Mechanics Enterprise (IMF) of Bucharest has in mind when offering its beneficiaries:

> - measuring and control apparatus for lengths, pressures, temperatures, discharges, times and speeds:

- special tools (diamond and sinter-carbide metal tools), holders, high-accuracy and fineness devices and dies, having a It is this efficiency (viz. quality, producti- | high degree of productivity and durability.



IN- AND

POST-PROCESS

SIZING GAUGES

nals are processed and displayed analogically or numerically in modular-type elec-

They are built according to modern

pneumatic post-process sizing gauge — SUPERIET • pneumo-electric post-

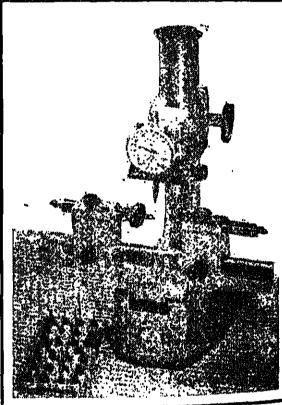
process sizing gauge - ELSUPERIET post-process sizing gauge with electric contacts inductive electronic post-pro-

rinciples, with pneumatic inductive, piezoeletric transducers, whose sig-

MEASURING AND DIMENSIONAL CONTROL APPARATUS AND INSTRUMENTS

dial gauges 6 bore dial gauges 6 gear measuring instruments; © threaded conic gauges for the oil industry.

circular dial snap gauges © gear pitch-error and gear-tooth-thickness measuring instruments © reading ball-gauges; optical read-out de-

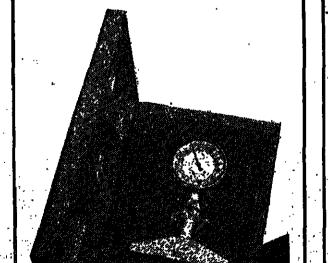


AND MECHANISMS

Programmers • electromechanical in pulse counters programme control for automatic washing machines discharge counters with oval wheels electromechanical tachographs for motorvehice complex speed measuring installations. tions for locomotives and subways,

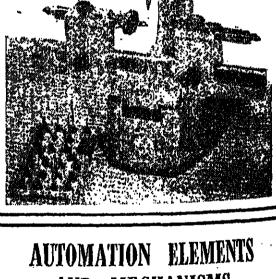
FOR PRESSURE INDUSTRIAL CLOCK-TYPE APPARATUS, INSTALLATIONS

This apparatus family includes pressure switches and thermostats. They are indispensable in the automation of starting and pensable in the automation of starting and stopping installations using fluids whate temperature and pressure must be maintained within certain preadjusted limits. Presided within certain preadjusted limits presided within certain preadjusted limits. Presided within certain preadjusted limits presided within a wide the fine Mechanics. Enterprise in a wide the freezest and included of motors they are mounted an anti-life conditions of the environment.



costs sizing gauge of roughness measuring post-process sizing gauge; smoothness measuring gauge (electronic levels).

in-process sizing gauge for continuous exterior cylinder surfaces with one and two measuring points O for continuous exterior surfaces and for continuous interior cylinder surfaces with two measuring points • in-process sizing gauge for centreless grinding machines • in-process sizing gauge for exterior diametres of narrow surfaces • copying systems mounted on machine tools for processing through copying after a pattern.

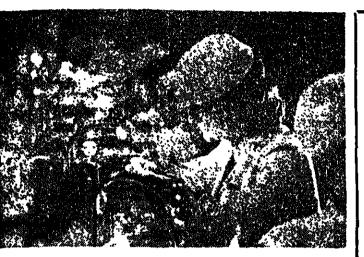


AND TEMPERATURE CONTROL

REMEMBER THE



IMF TRADEMARK



SINTER-CARBIDE **METAL PRODUCTS**

The main groups of products bearing the "CARME-SIN" mark — which are the object of the Bucharest Fine Mechanics Enterprise's production programme — are the following: sinter-carbide metal brazable tips and inserts for metal cutting; sinter-carbide metal inserts for mining tools; sinter-carbide metal inserts specific to the wood industry, building materials and extraction industry; products for drilling installations; dies for screws and nuts; dies for roll bearings; other types of products upon the foreign partners' demand.

According to the concrete destination indicated by the end user, these products are executed out of the PKMG groups of carbide metal powder, after ISO international standards or according to other requirements specified in the order.

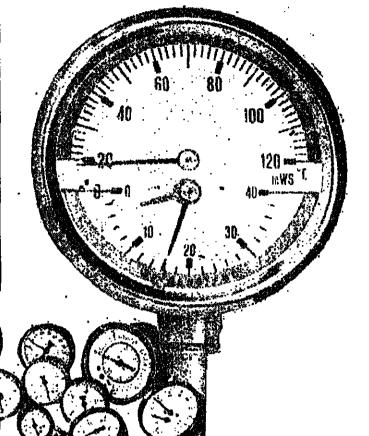
specified in the order.

In order to increase the durability and performances of the sinter-carbide metal inserts, the method is applied of coating them with extra-hard layers of titanium carbide, giving the inserts an increased durability of up



PRESSURE GAUGES

Through the great diversity resulting from constructive variants based on measuring limits, accuracy, diameter, connection and scale type, the Fine Mechanics Enterprise can satisfy the most exigent demands of its clients (standard pressure gauges or of special construction, upon demand). There are: 6 general use industrial manometers 6 vibration-proof manameters @ corrosion-proof manometers capsule-manometers double indication manameters • manometers-thermome-



DIAMOND TOOLS

metals, of sinter-carbide metal, stone, concrete, ceramic and glass — through modern methods — calls for the use of diamond

tools on an ever larger scale.

The manufacturing programme of this kind of tools is achieved at IMF on the basis of the licence purchased from WINTER firm of West Germany and is currently infull swing as a result of the growing demonstrate the following constraints. and, it comprises the following more important groups :

The processing of ferrous and non-ferrous | nuous binder of various shapes and sizes. with cubic boron nitride.

- diamond tools for construction-matetial processing

- diamond tools with galvanic binder

- honing diamond blades diamond pastes

diamond tools for trimming and shaping abrasive stones

- chambering tools with extra hard materials from diamond polycrystals or cubic boron nitride

- diamond drawing dies.

AND THE EXACT TIME

WHICH YOU CAN LEARN AT ANY MOMENT BY LOOKING AT THE DIAL OF THE WATCH WHOSE TRADEMARK OREX IS A GUARANTEE OF ACCURACY. BUILT IN SEVERAL HUNDRED MODELS BY IMF, THE WATCHES - MECHANIC OR QUARTZ-BASED ANALOG - MEET THE FINENESS OF YOUR AESTHETIC TASTE AND GIVE YOU THE EXACT TIME.



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